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ABSTRACT

This report highlights and summarizes a followup study to test some assumptions concerning the value of discovering one's transferable skills, particularly as that discovery may affect one's subsequent employment experience. (The followup study is available separately as CE 024 678.) Columbia University's Deep Investigation of Growth (DIG) program to identify personal success factors and use them in subsequent job search activities is briefly discussed, since the DIG success factor analysis, and resume reflecting it, were the specific "skill analysis and reporting" process studied. Data collection procedures and findings are reported for three groups: those now seeking the career counseling assistance of DIG, those who have participated in DIG, and those who have never and are not now seeking DIG assistance. The outcomes measured were skill utilization in employment, satisfaction with ability utilization, and job satisfaction. These conclusions are reported: (1) the self-analysis process is effective in encouraging consideration of one's employable skills as a set of skill attributes and in motivating search for employment utilizing one's skills; (2) those electing the DIG program do not appreciate their own versatility and skill marketability; and (3) a need exists for describing jobs in terms of skill attribute requirements. (YLB)

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Information Series No. 191

SELF-ASSESSMENT FOR CAREER CHANGE:

DOES IT REALLY WORK?

Summary Report of
A Follow-up Study

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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An Interim Report
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FOREWORD

The National Center for Research in Vocational Education is continuing its programmatic research of occupational adaptability and transferable skills. This is one of a series of reports that has been developed to aid researchers and educators in preparing today's youth and adults for careers that will be characterized by change. It contains a summary of the findings reported more fully in *Self-Assessment for Career Change: Does It Really Work? A Follow-Up Study.*

The study reported here was carried out to test some assumptions concerning the value of discovering one's transferable skills, particularly as that discovery may affect one's subsequent employment experience. Skills that have afforded personal satisfaction and fulfillment in past experiences were the special focus of the study.

Although clients of a particular program supplied a major part of the data used in the study, the program's skill assessment techniques are not novel. Generically speaking, their use is being advocated by an increasing number of authors and practitioners. Hence, it is hoped that this study's findings will be of interest to a wide audience.

We sincerely thank the several hundred alumni of Columbia University who gave of their time to respond to the survey. We are especially indebted to Richard Gummere, Joseph O'Steen, and members of the staff of Columbia's Career Advising Division, without whose unstinting cooperation this study would not have been possible. We are grateful, also, to Henry Pearson and Pricilla Elfrey for their careful reviews of the draft report; to Robert Stump, project monitor from the National Institute of Education, for his interest and helpful counsel throughout the study; and to John Crystal, Ruth Nickse, and Decker Walker for their services as consultants to the Transferable Skills project. This study has been a part of the Transferable Skills project directed by William Ashley. The study was conducted by Allen Wiant, assisted by Ronald Hutchinson.

Robert E. Taylor
Executive Director
The National Center for Research
in Vocational Education

BACKGROUND

Americans today face a complex and dynamic world of social, economic, and technological change. Substantial occupational mobility seems to be one of its characteristics. A recent study reported that roughly one-third of all American workers changed their jobs over a five-year period; only 47 percent of the men and 40 percent of the women employed in 1965 had the same occupation five years later (Sommers & Eck, 1977). These significant national statistics attest to the persistent need for effective education and work programs to help students become adaptable and flexible adults, better able to apply their capabilities and perform effectively in a variety of life and work settings. Attention needs to be directed to questions of what schools can do for all students to better prepare them, not only for jobs, but for work careers characterized by change, and to improve their chances of adapting when occupational change is desirable or necessary.

As a result of a variety of approaches to better understand the nature of transferable skills and the process of skill transfer, a number of perspectives have been gained. Those which are particularly relevant, and which contributed to the decision to pursue the study reported here, are outlined in this section.

One of the concepts emerging from prior studies is the strong suggestion that occupational adaptability may be dependent largely upon prior development of ability to use one's acquired capabilities under a range of different performance contexts and conditions. Skills are transferable after they first have been learned and subsequently have been applied in performance situations. The broader the scope and number of applications of the skill, the greater the potential for transfer of that skill to a new performance situation.

Essential facilitators of the transfer process apparently include both individual *awareness* and *motivation.* With regard to awareness, it is clear that individuals must recognize the nature of the skills they possess before they can "sell" them effectively. Individuals whose understanding of the skills they possess is limited to the tasks they have learned to perform ("occupational skills") in formal training programs or in previous jobs—skills such as typing business letters and maintaining files—are not likely to see themselves as candidates for other than narrowly defined types of work. Conversely, if they come to the realization that they possess, for example, communication, interpersonal, and organizational skills, this awareness can lead to a greatly enlarged view of realistic occupational prospects.

With regard to the role of motivation in the process of skill transfer, it is not entirely clear why we, as individuals, seem to selectively develop our abilities. It is apparent, however, that most of us enjoy using certain of our abilities more than others. Individual experience has taught us that the use of these provides personal satisfaction and fulfillment. These experiences motivate us to choose, where possible, situations which require the use of those abilities which satisfy, rather than some other abilities we may also possess, which do not.

A finding of previous work has been that, while there is substantial agreement as to the nature of skills that transfer, there also is a fundamental need for better assessment procedures. This need was uniformly recognized by employers represented in conferences on the recognition and utilization of transferable skills in employment practice (Wiant, 1977). Without either skill assessment techniques or skill reporting mechanisms, the value to an employer of an employee's transferable skills is largely a moot issue.

The DIG Program

Attempts have been made to identify programs of various kinds with an underlying concern for the transferability of acquired skills (Miguel, 1977). An examination of the features of such programs, it was hoped, would provide clues to innovative and effective practices or techniques. One program found to be of interest was Columbia University's "Deeper Investigation of Growth" (DIG), a program which shares much of the general philosophy of Haldane, Crystal, Bolles, and others. DIG requires participants to engage in a guided self-analysis process termed "success factor analysis" in which personal success factors are identified (Gummere, 1972). These factors consist of human abilities which have a wide range of usefulness. Bolles refers to them as skills, and has provided an excellent discussion of their nature (Bolles, 1978, p. 137f). In this report, they will be referred to interchangeably as transferable skills, traits, characteristics, aptitudes, or talents.

In the DIG program, these skills form the basis for the preparation of personal resumes, for use in subsequent job search activities. Participants also receive counseling as to the types of jobs and job activities for which their skill profiles are particularly well suited, as well as suggested techniques for use in the job search.

The DIG program is a non-credit, voluntary program, offered to Columbia graduates and undergraduates by the Career Advising Division of the Office of University Placement and Career Services. Completion of the program involves approximately six hours of small group sessions and three to six hours of individual counseling. It has been used by persons with a great diversity of backgrounds, talents, education, and prior work experience. Some who use it are about to complete their academic programs, while others have been out and working for some time. Although informal feedback suggested that many DIG participants had established satisfying careers as a result of the program, no systematic follow-up of DIG participants had been conducted.

The DIG program was of particular interest and significance for the further study of transferable skills owing to its focus upon producing an *awareness,* by those participating, of their own, particular "*motivated* skills."[1] The self-analysis process employed in DIG involves examination of one's satisfaction-producing life experiences, including but not limited to those in education and work. By means of this analysis, clues emerge as to the nature of the aptitudes brought into play in the selected life situations, which were responsible for the satisfaction derived. It is expected that each individual's aptitudes will then become the basis for his/her subsequent search for suitable employment.

Objectives of the Study

Those who have engaged in the self-analysis process have been observed by DIG counselors to have been greatly exhilarated by it. Immediate improvement in self-esteem and career expectations have been generally noted, along with revitalization of purpose. It has not been clear, however, whether there have been lasting effects upon career directions and employment for which an individual's motivated skills are best suited. Broadly stated, it was the purpose of this study to provide answers to this question.

In approaching the study reported here, it was hypothesized that when individuals become aware of the transferable skills they possess, this discovery and the accompanying motivation it produces will have positive effects on their subsequent employment experience.

[1] The terms "success factor analysis" and "motivated skills," used to describe the DIG approach, are attributed to Bernard Haldane.

A major objective of the DIG program is to increase the ability of program participants to transfer their skills to future employment. Concomitant increases in their "job satisfaction" are also expected. This is because DIG's basic thrust is to identify motivated skills—talents and abilities which have afforded personal enjoyment and satisfaction when exercised in previous life experiences. Therefore, the meaningful employment of these talents in the labor market is expected to contribute significantly to increased job satisfaction.

The specific objective of this study was therefore to determine whether persons who complete a skill analysis and reporting process increase their *skill utilization* and *job satisfaction* in subsequent employment. The DIG success factor analysis, and resume reflecting it, were the specific "skill analysis and reporting" process studied.

PROCEDURES AND FINDINGS

Data were collected from three groups representative of the following:

Group I: those with prior occupational experiences who now seek the career counseling assistance of the DIG program ("pre-DIG" group).

Group II: those who have participated in DIG in years past ("post-DIG" group)

Group III: those who have never experienced DIG and are not now seeking it ("non-DIG" group).

All three groups received academic preparation at the same institution (Columbia University).

It was initially expected that for groups with comparable demographic and educational backgrounds, analysis of their employment experience would show an advantage in favor of Group II in terms of the following outcomes, in particular:

(1) greater utilization of its members' skills in their employment;

(2) greater satisfaction with the utilization of the abilities of its members in their employment;

(3) greater job satisfaction generally.

Group scores on these outcome measures were the subject of hypotheses. The argument expressed by the hypotheses was that: (1) DIG makes an important difference to those who engage in it, (2) those who do so are initially no different than others of similar age, academic background, and occupational experience, (3) therefore, other things being equal, DIG participants should excel as a group.

The hypotheses concerning the group score comparisons, as well as the comparison results obtained, are summarized as follows:

Groups Compared	*Expected Differences*	*Findings*
a. Post-DIG vs. Non-DIG	Post-DIGs would be higher	No significant difference
b. Pre-DIG vs. Non-DIG	No significant difference	Non-DIG higher
c. Post-DIG vs. Pre-DIG	Post-DIGs would be higher	As expected

Significant differences between the groups with respect to age, sex, and area of academic preparation were found. When these were removed, comparison of the groups' scores on the outcome measures strongly supported expectations for comparison (c) only. The results expected for comparisons (a) and (b) were not obtained. Instead, there was no significant difference on comparison (a), and results showed that the non-DIG group outscored the pre-DIG group significantly on comparison (b).

This meant that the pre-DIG group was actually not representative of others of like age, experience, and academic preparation who had not experienced DIG. Rather, its members were using their skills to a much less significant extent, were much less satisfied with their jobs generally, and with their jobs' use of their abilities, were earning considerably less, and had lower occupational status. Further, the results of comparison (c) indicate that some time later, following their DIG experience, members of this group should be doing as well on these measures as their peers who have not experienced DIG. However, to interpret the results of comparison (c) in this way requires an assumption that those who enter the program today are representative of those who have participated in the past. Both the background characteristics examined and circumstantial evidence support this assumption. The unsolicited comments of members of the post-DIG group attest to the help they have received from the program. It is therefore concluded that those who experience DIG go on to much more fulfilling occupational experiences than before.

Based upon the results of comparison (c), made separately for men and women, significant improvements are experienced by both. However, the changes experienced by the men have apparently been greater with regard to increased income and improved satisfaction concerning the utilization of their abilities. Thus, although post-DIG men and women did not differ significantly with respect to their skill utilization, intrinsic job satisfactions, or occupational status, the women were understandably less satisfied with extrinsic aspects of their jobs such as pay, advancement opportunity, security, and company policy.

The data obtained do not explain why those who choose to engage in DIG should differ from those who don't – why their occupational experiences should have been less rewarding prior to DIG. However, the skills representative of the two groups offer some clues.

On the basis of the skills identified by each respondent as representative of his/her most important and satisfying skill attributes, the groups could be described collectively as creative, analytical, logical, articulate, and responsible. However, there were differences of emphasis. Members of the post-DIG group emphasized their verbal communication and organizing skills and selected various interpersonal skills to describe themselves somewhat more than those in the non-DIG group. The latter reported their skills to be more concentrated in the areas of analyzing and logical thinking.

Combined data from both groups indicated that the skill attributes most heavily utilized in the occupations in which they were engaged were more typical of the non-DIG group's areas of greatest strength. In contrast, some of the particular strengths of the DIG participants were among the least utilized. Thus, the relatively low skills utilization reported by the pre-DIG group could be partially the result of its inability to find employment opportunities that required its particular skill strengths. The study showed reasonably strong correlation between a "skills utilization index" (SUI) and satisfaction with the utilization of one's abilities, and between SUI and general job satisfaction. Thus, the pre-DIG group's lower scores on all three could be explained in part by a relatively weak demand for its particular skills in the job market.

CONCLUSIONS

The self-analysis process employed by DIG and others seems to be an effective intervention. It encourages one to think of one's employable skills in terms of a rather broad but powerful set of skill attributes. It then encourages the conceptualization of occupational requirements in these terms, and provides motivation to search for an opportunity to more fully utilize one's particular skills. The data obtained in this study strongly indicate that those who have elected to use the DIG program have subsequently experienced employment which has allowed them to use their skill attributes more fully than before, and has provided increased intrinsic and extrinsic rewards at the same salary levels as their peers.

These individuals' reasons for taking the program are not fully understood. Others of similar age, academic areas, and educational level seem to be doing as well without entering the program. However, the DIG approach is neither unique nor new. The general approach taken is advocated in popular publications which include best sellers. Thus, it cannot be presumed that those who have not sought the assistance of a program such as DIG are totally ignorant of its basic philosophy.

Findings suggest that those who elect the DIG program do not appreciate their own versatility and the marketability of their skill attributes. Until this experience, they conceive of their skills and abilities in narrow, specialized, and conventional terms. The DIG experience modifies their self-perceptions and often redirects their career aspirations based on new perceptions of their skill attributes and the importance of these for their self-fulfillment. Findings also suggest that the nature of the skills of those who elect DIG are somewhat different than those of their peers, and that these areas of strength need opportunities to be creative, verbal, and personal in order to be gratified. Further, indications are that there is less occupational demand for these abilities than for some others. If this is the case, then the search for satisfying occupations on the part of such persons needs to be consciously directed and well informed.

At the outset of the study, it was postulated that if the educationally privileged could be helped by such a process, then those less privileged could be presumed to be similarly capable of help. The subjects of the study must be numbered among the former. Their educational advantages did not, however, guarantee a level of self-understanding adequate to direct them to satisfying employment.

Those who were the focus of the study (i.e., those participating in DIG) were characterized by academic preparation that lacked occupational focus (as opposed to preparation for the professions). However, the results of the study do not preclude the possibility that many who choose early to prepare for more specific careers may do so without adequate understanding of their skill attributes, or may also have a restricted view of their skills. Most of those who had engaged in DIG had done so at a point in their lives when their academic preparation was essentially complete. The identification of one's skill attributes at a much earlier stage in one's educational development would seem to be a much more powerful intervention, helping to inform one's educational and vocational decisions.

Finally, a weakness of the approach as it now exists is that although the transferable skills of an individual are identified and made the focus of subsequent job-finding activities, no mechanism exists for describing jobs in the same terms. That is, there is no readily available resource that adequately describes jobs in terms of such skill attribute requirements as are identified in the DIG process. Thus, the success of individuals who take such an approach is dependent, to a large degree, on both the ability and willingness of prospective employers to evaluate the requirements of their firms' positions in the same terms of reference.

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Wiant, A.A. *Self-assessment for career change: Does it really work? Summary report of a follow-up study* (Info. Series No. 191), 1979.

An analysis of the impact of self-assessment on one's subsequent employment experience. The particular assessment technique studied is one intended to help identify those skill attributes which have provided satisfaction in various life experiences. Outcome measures included skill utilization and job satisfaction.

Selz, N.A., and Jones, J.S. *Functional competencies in occupational adaptability and consumer economics,* 1979.

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